

**[0067] ABSTRACT**

**[0068]** A network device for performing redirect checking includes an input device and processing logic. The input device receives a data packet on a first one of a number of interfaces. The data packet includes source and destination addresses. The processing logic assigns an incoming interface to the data packet and generates forwarding information identifying a next hop for the data packet. The processing logic also identifies an outgoing interface based on the next hop and determines whether the incoming interface index is equal to the outgoing interface index. The processing logic also determines whether the data packet originated from a station that is part of the same subnet as the next hop. When both of these conditions are met, the processing logic generates a redirect message.